

REMARKS

Reconsideration and allowance are respectfully requested.

Applicants request that the Examiner initial the “other documents” reference entry on the IDS form previously submitted.

The amended claims and abstract remove the reference numerals. This moots the Examiner’s concern regarding claim 4. Some of the claims have been amended to eliminate the use of “means” language and are now specifically recited using non-mean plus function language. None of the amendments is a narrowing amendment.

Applicants note with appreciation the indication of allowable subject matter in claims 12-14. For the reasons explained below, all claims should be allowed.

Claim 1 stands rejected as being unpatentable over Bolda et al. (US 6,204,751) in view of Flanagan (US 3,159,768). This rejection is respectfully traversed.

The electric circuit breaker according to claim 1 includes a switch to be arranged in the electrical circuit to be protected against excessive current loads. A triggering device causes the switch to break that electrical circuit in response to a tripping signal. A second current detector causes the switch to break the electrical circuit if a current flowing in the electrical circuit exceeds a predetermined rated current for more than a specified duration.

Bolda does not relate to an electric circuit breaker but instead describes a network system in which power conductors provide electrical power to a plurality of network nodes. See column 1, lines 6 to 14. The embodiment of Figure 2 is a motor overload relay for providing a signal to interrupt a three phase line current if a fault condition, such a phase loss or ground fault, is detected. See column 4, lines 61 to 64. The motor overload relay includes a sensing module with sensors arranged to monitor the line current on three phase power lines as well as a

microcontroller. If either a ground fault condition or a loss of phase condition is detected, the microcontroller provides an output signal sufficient to energize a coil of a trip relay. When the relay switch opens in response to a fault condition, the coil of a three phase contactor is de-energized, resulting in interruption of operation of the motor. See column 5, lines 11 to 59.

On the other hand, Flanagan does not relate to a networked system having a plurality of nodes as in Bolda, but teaches a thermal responsive circuit breaking relay for protecting an electrical load against overheating. See column 1, line 55. A thermistor is thermally coupled with an electrical load to sense its temperature. As stated in column 2, lines 37 to 64, a rise in the temperature of the load causes a decrease of the resistance of the thermistor, thus increasing the current through the bucking relay winding of a differential relay. The result is that the composite flux in the magnetic circuit of the relay exceeds that required to pull in the relay armature and actuate the relay switch. The switch action shunts the resistor in series with the bucking relay winding to further increase the current flow through the bucking relay winding. This effectively increases the difference in the temperature necessary to cause actuation of the relay and that temperature below which the thermistor must fall to permit the relay to become de-actuated.

A person of ordinary skill in the art would not have reason to combine Bolda and Flanagan as the Examiner proposes. As just described, it is clear that the teachings of Bolda relating to a network system and those of Flanagan aiming at protecting an electrical load against overheating are directed to different technologies. In addition, the teachings of Bolda and Flanagan are incompatible. Flanagan teaches breaking the current through the electrical load in response to a temperature rise of the thermistor which causes an increase in the current through

the bucking relay winding. On the other hand, Bolda teaches a three phase contactor the coil of which is de-energized in response to a fault condition. See column 5, lines 55 and 56.

Even a combination of Bolda and Flanagan does not cause a switch arranged in an electrical circuit to break the electrical circuit if a current flowing in the electrical circuit (1) exceeds a predetermined rated current (2) for more than a specified duration. Flanagan does not consider if a current flowing in the electrical circuit exceeds a predetermined rated current for more than a specified duration, but instead focuses on the temperature of the electrical load. The Examiner refers to column 2, lines 18-21 of Flanagan as teaching this feature. Applicants have reviewed this text and find no mention or hint of a specified time duration—let alone a teaching of opening the switch SWA if a current flowing in the electrical circuit L1 exceeds a predetermined rated current for more than a specified duration. Indeed, the very rationale the Examiner posits for combining Flanagan with Bolda, i.e., “because [Flanagan] provides an *instant* protection in case of an overload condition,” (emphasis added), confirms that Flanagan does not consider if a current flowing in the electrical circuit exceeds a predetermined rated current for more than a specified duration. Neither does Bolda whose motor overload relay just interrupts the line current if a fault condition such as a phase loss or ground fault is detected. See column 4, lines 61 to 64.

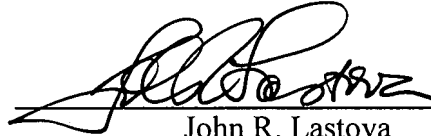
None of the supplemental references relied on by the Examiner were cited to show this claim feature that is missing in Bolda and Flanagan. The application is in condition for allowance. An early notice to that effect is respectfully requested.

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Respectfully submitted,

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By: _____

A handwritten signature in black ink, appearing to read 'John R. Lastova', written over a horizontal line.

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